AUG 1 8 2006

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Ke Liu et al Examiner: Patel, Vinit H.

Serial No.: 10/731,291 Art Unit: 1764

Filed: December 9, 2003 Docket No.: C-2775AHyS

Title: Mini-CPO Providing Hydrogen for Hydrogen

Desulfurization of Hydrocarbon Feeds

## **DECLARATION UNDER 37 CFR 1.132**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Antonio M. Vincitore, Ph.D. declares that:

- 1. He resides at 73 Norman Drive, South Windsor, CT 06074.
- 2. He has a Ph.D. degree, major in Chemical Engineering.
- 3. He has been employed by UTC Fuel Cells, LLC (and predecessors) for 14 years, working in technologies related to generation, purification and utilization of hydrogen, including reformation of hydrocarbon fuels and hydrodesulfurization.
- 4. He is and has been familiar with shave gas, a mix of oxygen and propane used to temporarily increase the volume of gas provided in a natural gas feed.
- 5. He is and has been familiar with "pre-oxidizers" which cause oxidation of a small amount of the hydrocarbon fuel in a feed containing shave

gas, thereby eliminating the oxygen by producing carbon dioxide and water; this prevents unwanted high temperature reactions with oxygen in other parts of the apparatus. Such pre-oxidizers do not produce hydrogen.

- 6. He has reviewed U.S. patent No. 5,360,679 and has determined that element 154 is a pre-oxidizer described in paragraph 5 above and does not produce hydrogen.
- 7. All statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Antonio M. Vincitore

6 9 06 Date